

(43) International Publication Date
11 November 2004 (11.11.2004)

PCT

(10) International Publication Number
WO 2004/097886 A3

(51) International Patent Classification⁷: H01J 35/04, 35/08 [GB/GB]; 17 Dene Street Gardens, Dorking, Surrey RH4 2DN (GB). DE ANTONIS, Paul [GB/GB]; 3 Valve Drive, Horsham, West Sussex RH12 2JU (GB).

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(22) International Filing Date: 23 April 2004 (23.04.2004)

(25) Filing Language: English (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(26) Publication Language: English

(30) Priority Data: 0309371.3 25 April 2003 (25.04.2003) GB

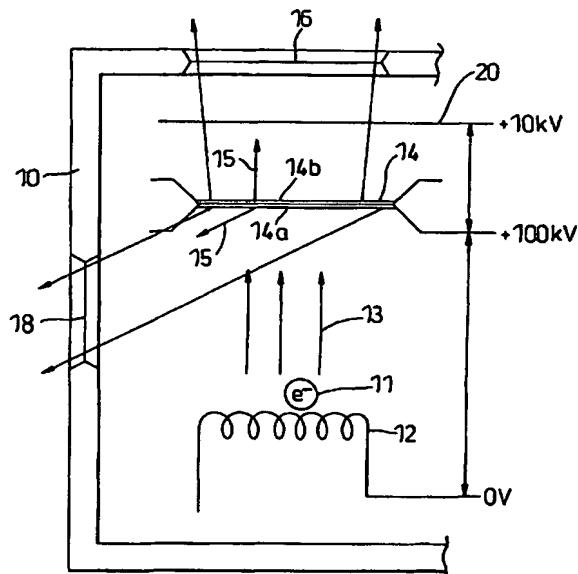
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[Continued on next page]

(54) Title: X-RAY TUBES



(57) Abstract: An X-ray tube comprises an electron source in the form of a cathode (12), and an anode (14) within a housing (10). The anode (14) is a thin film anode, so that most of the electrons which do not interact with it to produce X-rays pass directly through it. X-rays can be collected through a first window (16) directly behind the anode (14), or a second window (18) to one side of the anode. A retardation electrode 20 is located behind the anode 4 and is held at a potential which is negative with respect to the anode 14, and slightly positive with respect to the cathode (12). This retardation electrode (20) produces an electric field which slows down electrons passing through the anode (14) so that, when they interact with it, they are at relatively low energies. This reduces the heat load on the tube.



TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(15) Information about Correction:

Previous Correction:

see PCT Gazette No. 03/2005 of 20 January 2005, Section II

Published:

- *with international search report*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

(88) Date of publication of the international search report:

28 July 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

Int'l Application No
PCT/GB2004/001731

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H01J35/04 H01J35/08

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 H01J

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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Patent family members are listed in annex.

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Date of the actual completion of the international search

18 May 2005

Date of mailing of the international search report

27/05/2005

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Int	Application No
PCT/GB2004/001731	

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